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10/053,011	01/18/2002	Arup Acharya	YOR920020013US1	2105

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EXAMINER
SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 June 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-13,15-17,19-25 and 27* is/are pending in the application.

    4a) Of the above claim(s) *9,14,18 and 26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-13,15-17,19-25 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant has amended claims 1, 10, 11, 13 and 15.
Claims 9, 14, 18 and 26 have been cancelled.
Claims 1-8, 10-13, 15, 17, 19-25 and 27 are pending.

Response to Arguments

1.   Applicant's arguments filed 6/9/2005 have been fully considered but they are not

persuasive.

    A.   Applicant argues, in substance, that the claims are allowable because "the
independent claims were amended to include the limitations of the allowable [objected to]
claims" and because the claims have not been "anticipated or made obvious by the cited art"
(Remarks, page 9).

    B.   The Examiner respectfully disagrees. The previous non-final Office Action

mailed on 3/15/2005 indicated that claims 9, 14, 18 and 26 are objected to for containing minor

informalities. In addition to these objections, claims 9, 14 and 18 were also rejected under a 35

U.S.C. 102(e) rejection under the prior art *Blight et al* (US Publication 2002/0194498). The

Office Action included no indication or statement of allowability for these objected to claims or

any of the pending claims, because all of the pending claims were rejected under prior art

rejections under 35 U.S.C. 102(e) and/or 35 U.S.C. 103(a). Therefore the incorporation of

dependent claims 9, 14 and 18 into independent claims 1, 13 and 15, respectively, is insufficient

to overcome the prior art rejections and furthermore fails to qualify the claims for allowability.

Thus the rejection of the pending claims is sustained.

Examiner Note

2.   The Examiner notes claims 10 and 11 have been amended but lack the proper status

identifiers. Under rule 37 C.F.R. 1.121 it states:

> All claims being currently amended in an amendment paper shall be
> presented in the claim listing, indicate a status of "currently amended," and be
> submitted with markings to indicate the changes that have been made relative to
> the immediate prior version of the claims. The text of any added subject matter
> must be shown by underlining the added text. The text of any deleted matter
> must be shown by strike-through except that double brackets placed before and
> after the deleted characters may be used to show deletion of. five or fewer
> consecutive characters. The text of any deleted subject matter must be shown by
> being placed within double brackets if strike-through cannot be easily perceived.
> Only claims having the status of "currently amended," or "withdrawn" if also
> being amended, shall include markings. If a withdrawn claim is currently
> amended, its status in the claim listing may be identified as "withdrawn—
> currently amended."
> When claim text in clean version is required. The text of all pending claims
> not being currently amended shall be presented in the claim listing in clean
> version, i.e., without any markings in the presentation of text. The presentation
> of a clean version of any claim having the status of "original," "withdrawn" or
> "previously presented" will constitute an assertion that it has not been changed
> relative to the immediate prior version, except to omit markings that may have
> been present in the immediate prior version of the claims of the status of
> "withdrawn" or "previously presented." Any claim added by amendment must
> be indicated with the status of "new" and presented in clean version, i.e.,
> without any underlining.

Therefore, appropriate correction and indication of the amended claims is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

4.   Claims **1-7, 9-16, and 18-27** are rejected under 35 U.S.C. 102(e) as being anticipated by *Blight et al* (US 2002/0194498).

Regarding claim 1, *Blight et al* teach a method comprising a requester discovering at least one service in a local domain, including the steps of: obtaining an address of a proxy serving as a Service Discovery Proxy for said local domain (page 2, section 0017 and page 4, section 0067 and page 5, section 0110-0113); establishing a connection to said Service Discovery Proxy; and employing said Service Discovery Proxy in discovering dynamic availability of said at least one service in said local domain (page 1, section 0016 and page 4, section 0075-0087 and 0104 and page 7, section 0205-0221), wherein the step of employing includes: said Service Discovery Proxy receiving a request from said requester for service discovery; said Service Discovery Proxy invoking a service discovery protocol in said local domain; customizing responses from services in said local domain; and said Service Discovery Proxy sending customized responses to said requester (page 2, section 0017 and page 7, section 0205-0221).

Regarding claim 13, *Blight et al* teach a method comprising forming a Service Discovery Proxy including the steps of: assigning an available proxy to represent a local domain; establishing a connection between said available proxy and a network (page 2, section 0017); and registering said available proxy as the Service Discovery Proxy representing the local domain (page 5, section 0110-0113 and 0143 and page 7, section 0212-0220), wherein the step of registering is performed employing a central registry (page 2, section 0017 and page 5, section 0111-0113 and 0143 and page 7, section 0212-0214).

Regarding claim 15, *Blight et al* teach a Service Discovery Proxy comprising; a network communication module having an assigned communication address (page 3, section 0044), a service detector module to detect dynamically available services in a local domain represented by said proxy (page 2, section 0017); a processing module to process at least one incoming query from a requester regarding availability of at least one service (page 4, section 0075-0087 and 0104 and page 5, section 0110-0133); and a responding module to form outgoing responses to said at least one incoming query allowing discovery of any of said dynamically available services by said requester (page 7, section 0205-0221), wherein said network communication module obtains an assigned network communication address from a network address assigning entity; and registers said assigned network communication address with a central registry as a Service Discovery Proxy (page 2, section 0017 and page 4, section 0067 and page 5, section 0111-0113 and 0142 and page 7, section 0212-0214).

Regarding claim 2, *Blight et al* teach a method as recited in claim 1, further comprising employing one service from said at least one service (page 1, section 0001 and page 4, section 0087 and page 5, section 0128-0133).

Regarding claim 3, *Blight et al* teach a method as recited in claim 1, wherein the step of obtaining includes: contacting a central registry having addresses for a plurality of Service Discovery Proxies; and selecting the address of a particular Service Discovery Proxy serving the local domain (page 2, section 0017 and page 5, section 0111-0113 and page 7, section 0212-0215).

Regarding claim 4, *Blight et al* teach a method as recited in claim 1, wherein the step of establishing includes employing said address in accordance with a transmission protocol (page 3, section 0045-0049 and page 4, section 0067 and 0101).

Regarding claim 5, *Blight et al* teach a method as recited in claim 4, wherein the transmission protocol is TCP/IP (page 4, section 0067).

Regarding claim 6, *Blight et al* teach a method as recited in claim 1, wherein the step of employing includes querying said Service Discovery Proxy for a list of services currently active in said local domain (page 4, section 0104 and page 5, section 0110-0125).

Regarding claim 7, *Blight et al* teach a method as recited in claim 1, wherein said requester provides a list of services for which status is queried to said Service Discovery Proxy (page 4, section 0075-0087 and page 5, section 0110-0133).

Regarding claim 10, *Blight et al* teach a method as recited in claim 1, wherein the step of customizing includes at least one function taken from a group of functions including: formatting; filtering; aggregating; encapsulating; segmenting; selecting, and a requester defined function (page 5, section 0137).

Regarding claim 11, *Blight et al* teach a method as recited in claim 1, wherein the service discovery protocol includes Service Location Protocol (page 3, section 0045-0049 and page 4, section 0067 and 0101).

Regarding claim 12, *Blight et al* teach a method as recited in claim 1, wherein the step of employing includes receiving information enabling said requester to utilize said at least one service (page 1, section 0001 and page 4, section 0087 and page 5, section 0128-0133).

Regarding claim 16, *Blight et al* teach a proxy as recited in claim 15, wherein said communication address exists in a central registry to allow said proxy to be accessed from a plurality of requesters (page 2, section 0017 and page 4, section 0067 and page 5, section 0111-0113 and 0142 and page 7, section 0212-0214).

Regarding claim 19, *Blight et al* teach a proxy as recited in claim 15, wherein said service detector module communications functionality from a group of functionalities including: supports at least one at least one physical communication media; at least one link protocol; at least one network protocol; at least one transmission protocol; at least one service discovery protocol; receiving service queries from said processing module; determining an appropriate communication protocol to be used; performing service discovery in accordance with a selected service discovery protocol; and any combination of these (page 3, section 0045-0049 and page 4, section 0067 and 0075 and 0087 and 0101).

Regarding claim 20, *Blight et al* teach a proxy as recited in claim 15, wherein said service detector module determines all appropriate communication protocol to use (page 3, section 0045-0049 and page 4, section 0067 and 0101).

Regarding claim 21, *Blight et al* teach a proxy as recited in claim 15, wherein said processing module performs a function taken from a group of functions including: querying the availability of at least one service; querying all available services; querying the employment of said service; interpreting said query and invoking service detector module; and any combination of these (page 4, section 0104 and page 5, section 0110-0125).

Regarding claim 22, *Blight et al* teach a proxy as recited in claim 15, wherein said responding module transmits said query response to the requester (page 2, section 0017 and page 7, section 0205-0221).

Regarding claim 23, *Blight et al* teach a proxy as recited in claim 15, wherein said responding module aggregates a plurality of query responses before transmitting a particular response to the requester (page 4, section 0075 and 0087 and page 5, section 0110-0133).

Regarding claim 24, *Blight et al* teach an article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing requester discovery of a service, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1 (page 2, section 0017 and page 3, section 0044).

Regarding claim 25, *Blight et al* teach a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for requester service discovery said method steps comprising the steps of claim 1 (page 2, section 0017 and page 3, section 0044).

Regarding claim 27, *Blight et al* teach a computer program product comprising a computer usable medium having computer readable program code means embodied therein for causing functions of a Service Discovery Proxy, the computer readable program code means in said computer program product comprising computer readable program code means for causing a computer to effect the functions of claim 15 (page 2, section 0017 and page 3, section 0044).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims **8 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over to *Blight et al* (US Publication 2002/0194498) in view of *Murphy et al* (USPN 6,845,393).

Regarding claim 8, *Blight et al* teach a method as recited in claim 7 (page 4, section 0075-0087 and page 5, section 0110-0133).

Blight et al does not teach dynamically updating the list of services currently active in said local domain without registering any of said services with a central registry. *Murphy et al* teach further comprising dynamically updating the list of services currently active in said local domain without registering any of said services with a central registry (abstract, column 4, lines 19-32 and column 6, line 59-column 7, line 5). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the mobile communication system for location aware services of *Blight et al* by dynamically updating the list of services currently active in said local domain without registering any of said services with a central registry because this creates a more global system and relieves the registry of having to keep up to date information on each service.

Regarding claim 17, *Blight et al* teach a proxy as recited in claim 15 (page 7, section 0205-0221).

Blight et al does not teach establishes a listening port for incoming queries; and communicates with a plurality of requesters with a transmission protocol. *Murphy et al* teach wherein said network communication module further: establishes a listening port for incoming queries; and communicates with a plurality of requesters with a transmission protocol (column 4, lines 11-18). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the mobile communication system for location aware services of *Blight et al* by establishes a listening port for incoming queries; and communicates with a plurality of requesters with a transmission protocol because the proxy will be able to receive all queries that are trying to be submitted regardless of any obstruction such as a firewall.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to mobile communication system for location aware services: *O'Connor et al.*, *Ebata et al.*, *Blight et al.*, *Liao et al.*, *Teodosiu et al.*, *Smith et al.*

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

kds

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